
Agent features

This section lists both basic and advanced agent features in alphabetical order. Each feature name is followed by *Basic* if the feature is part of ACD basic features (ACD-A, package 45) or *Advanced* if it is part of ACD advanced features (ACD-B, package 41). For a complete list of the features in each package, refer to [“Document overview” on page 1](#).

ACD Calls on Hold

The Automatic Call Distribution (ACD) Calls on Hold enhancement introduces a modification to the conditions under which an ACD agent may go into Make Set Busy state by operating the Make Set Busy (MSB) key. Prior to the introduction of the ACD Calls on Hold enhancement the ACD agent could go into Make Set Busy state, by depressing the MSB key, while the agent still had a call on hold. With the introduction of the ACD Calls on Hold enhancement the system administrator now has the option of disallowing an ACD agent with a call on hold from going into Make Set Busy state.

Whether an ACD agent is allowed, or not, to go into Make Set Busy state while a call is still held by that agent is determined by the response to the new HMSB prompt in LD 23.

When the response to the HMSB prompt is NO, agents which have calls on hold cannot go into Make Set Busy state.

Operating parameters

There are no feature requirements.

Feature interactions

There are no interactions with other features.

Feature packaging

International Supplementary Features (SUPP) package 131; and Basic Automatic Call Distribution (BACD) package 40.

Feature implementation

LD 23 – This overlay is modified to accept responses to and print the new HMSB prompt if the SUPP package (131) is equipped.

Modify or create data for each ACD queue:

Prompt	Response	Description
REQ	NEW CHG PRT	Add data. Change data. Print data.
TYPE	ACD	Automatic Call Distribution data block.
CUST	xx	Customer number.
ACDN	xxxx	Automatic Call Distribution Directory Number.
...		
CWTT	...	
HMSB	(YES), NO	Hold Make Set Busy (allowed) denied. Respond with YES to allow, or NO to disallow, agents to go into Make Set Busy state while they have calls on hold.
...		

Printing the ACD data block will include the HMSB prompt and its response.

Feature operation

If an agent presses the Make Set Busy key when Automatic Call Distribution Calls on Hold is enabled, the action will be ignored.

ACD Threshold Visual Indication (Advanced)

This Automatic Call Distribution (ACD) Threshold Visual Indication enhancement provides a visual indication, to all agents, to notify them of any calls which have been queued for more than a specified amount of time. Prior to the introduction of the ACD Threshold Visual Indication enhancement, the only visual indication given to agents was when the number of calls in the queue exceeded the thresholds defined. With the introduction of the ACD Threshold Visual Indication enhancement, ACD agents may be given a visual indication when there are any calls which have been queued for more than a defined period of time.

The agents are given the visual indication via the new ACD Call Waiting Time Indication (ATW) key.

Operating parameters

LD 25 (Move Data Block)

This overlay is modified to include the ATW key information when the data block is moved from one loop to another loop.

LD 80 (Trace Call Diagnostic)

This overlay is modified to include the ATW key information when the Trace Call Diagnostic is used.

LD 81 (Feature and Stations Print)

This overlay is modified to include the ATW key information when the Feature and Stations Print routine is used.

LD 83 (Terminal Number Sort Print)

This overlay is modified to include the ATW key information when printing the TN Block information.

Feature interactions

There are no interactions with other features.

Feature packaging

International Supplementary Features (SUPP) package 131; Basic Automatic Call Distribution (BACD) package 40; and Automatic Call Distribution Package B (ACDB) package 41.

Feature implementation

LD 11 – This overlay is modified to accept the new key type ATW in response to the KEY prompt when the SUPP (131), BACD (40), and ACDB (41) packages are equipped.

Modify or create data block for each agent.

Prompt	Response	Description
REQ	NEW CHG	Add new data. Change existing data.
TYPE	xxxx	Type of data block.
...		
LANG	...	
KEY	0-69 ATW	Key number; ACD Call Waiting Time Indication key.

LD 20 – This overlay is modified to print the new ATW key type when the SUPP (131), BACD (40), and ACDB (41) packages are equipped.

Prompt	Response	Description
REQ	PRT	Print data block.
TYPE	xxxx	Type of data block.

LD 23 – This overlay is modified to accept responses to and print the new CWTT prompt when the SUPP (131) package is equipped.

Modify, create, or print data for each ACD queue

Prompt	Response	Description
REQ	NEW CHG PRT	Add new data. Change existing data. Print data.
TYPE	ACD	Automatic Call Distribution data block.
CUST	xx	Customer number.
ACDN	xxxx	Automatic Call Distribution Directory Number.
...		
FNCF	...	
CWTT	0-(40)-63	ACD Call Waiting Threshold Timer. Enter the time, in one second increments, that a call must be in queue to activate the ATW indicator on agent sets.

Printing the ACD data block will include the CWTT prompt and its response.

Feature operation

Press the **AWT** key to be given a visual indication when there are any calls which have been queued for more than a defined period of time.

Agent and supervisor communication (Advanced)

When an ACD agent is not active on an ACD call, the agent can press the Supervisor key to call the assigned supervisor. The associated lamp on the agent telephone lights steadily and the ringback tone is heard. When the supervisor answers, the Supervisor lamp on the agent's telephone remains lit and the agent and supervisor can talk.

When an agent calls the supervisor, tone ringing sounds from the supervisor's terminal speaker and the Answer Agent lamp flashes. The supervisor answers the call by pressing the Answer Agent key, and the display shows the calling agent's ACD Position Identification (POS ID). The supervisor's Not Ready lamp lights steadily. If the Not Ready lamp is already on, it remains on.

Three-party operation

If the ACD agent is active on an ACD call and presses the Supervisor key, the calling party is put on hold (fast flashing In-Calls lamp). The lamp associated with the Supervisor key lights steadily, and the ringback tone is heard. When the supervisor answers, the agent and the supervisor can talk privately.

When the agent presses the Supervisor key a second time, the calling party (on hold with the In-Calls key) is added to the conversation. The Supervisor lamp on the agent's telephone goes dark, and the conference (agent/caller/supervisor) is established on the agent's In-Calls key. By pressing the RLS key, the agent can leave the conference call, and the caller and supervisor remain connected. Alternatively, the supervisor can press the RLS key and leave the call. The agent and caller are still connected.

Call Source Identification (Basic)

Call Source Identification is an optional feature using the Digit Display on the agent's telephone. With the incoming call displayed on the screen, the agent is able to respond appropriately to the caller. For calls coming from incoming trunks, the trunk access code and the member number of the trunk are shown. For internal calls, it shows the DN of the calling telephone.

The ACD agent position can be equipped with other additional features. These features are described in *X11 features and services*. Non-ACD features can also be assigned to the DN key of an ACD telephone.

Calls Waiting Indication key (AWC) (Basic)

ACD telephones may be equipped with Light Emitting Diodes (LEDs) or Liquid Crystal Display (LCD) indicators to show the agent status in ACD queues. The indicator states are determined by the threshold values set in administration programs. Refer to *Automatic Call Distribution ACD management reports* (553-2671-112) for a complete description.

Depending on the threshold values defined for each ACD DN, Call Waiting indicators can display the following states:

- **Dark or blank** The queue load is light or empty.
- **Steadily lit** At least one call is waiting, but the load is within normal limits.

500/2500 telephone

If call waiting and warning tones are allowed in the telephone class of service, call waiting for external calls operates. If the agent is busy on an IDN call and another IDN call comes in, the call waiting treatment is allowed. If the agent is busy on an ACD call, the incoming IDN call receives a busy tone.

Calls Waiting Indication key (AWC) (Advanced)

Telephones for an ACD system are equipped with Light Emitting Diodes (LEDs) or Liquid Crystal Display (LCD) indicators to show the call status in ACD queues. The indicator states are determined by the threshold values set in administration programs. Refer to the *X11 input/output guide* for a complete description.

The call waiting indicator relies on thresholds associated with Automatic Overflow. The Call Waiting Threshold (CWTH), Busy Threshold (BYTH), and Overflow Threshold (OVTH) govern Automatic Overflow and provide steady, flashing, and fast flashing lamps.

In X11 Release 15, two prompts allow the lamp states to operate independently of the Automatic Overflow parameters. Call Waiting Lamp Flash (CWLFL) and Call Waiting Lamp Fast Flash (CWLFW) can be configured to flash and fast flash the lamps even though the Automatic Overflow parameters have not been met or exceeded.

Depending on the threshold values set for each ACD DN, the LEDs and LCDs display the following states:

- **Dark or blank** The queue is empty, or the number of calls in the queue is less than the Calls Waiting Threshold (CWTH).
- **Steadily lit** The CWTH has been met or exceeded. The number of calls in the queue is less than the Call Waiting Lamp Flash (CWLFL) threshold.
- **Flash** The CWLFL threshold has been met or exceeded. The number of calls in the queue is less than the CWLFW.
 - **Slow flash** (60 ipm) Busy. The number of calls waiting in this queue exceeds the busy threshold set for this ACD DN.
 - **Fast flash** (120 ipm) Overloaded. New calls to this ACD DN will attempt to overflow to another programmed destination.

Directory Number key (Basic)

When an agent presses a DN key to make or receive a call, any other call in progress is automatically released (unless on hold).

When the call on the DN key is released, the agent position is automatically returned to whatever state it was in before the DN key was pressed. Any call being presented to the In-Calls key, but not yet answered by the agent when the DN key is pressed, is moved back to the head of its priority grouping in the incoming call queue for the ACD DN.

The DN lamp flashes slowly when an incoming call to the DN is connected to the telephone. It is lit steadily while the call is in progress and flashes quickly if the call is placed on hold. Activating the Make Set Busy (MSB) key prevents DN calls from being connected to the agent position. With X11 Release 17 and earlier, the agent cannot depress the Hold key when on a DN call and receive an ACD call. X11 Release 18 and later allows this with Alternate Call Answer. Refer to [“Alternate Call Answer \(Basic\)” on page 81](#) for more information.

Display Waiting Calls (DWC) key

A Display Waiting Calls key can be assigned to ACD agent sets. This feature, which has been available on ACD supervisor sets, is available for agent sets in X11 Release 19 and later. An ACD DN can be programmed on a DWC key on any number of agent telephones.

The lamp associated with the Display Waiting Calls key provides summary information on the Calls Waiting status for the ACD DN. A lamp that is steadily lit means there is more than one call waiting in the queue.

When the DWC key is pressed, the Calls Waiting status for the ACD DN is displayed as follows:

aaa—bbb—ccc—dddd

Legend:

aaa = the number of calls currently waiting in the queue

bbb = the number of agent positions occupied for the ACD DN

ccc = the waiting time in seconds of the oldest call in the queue

dddd = always zero (0) with Basic ACD

This information is updated every time the key is pressed and remains visible until an event occurs to modify the display. Typical events include an incoming call or the pressing of the DN or Release key.

Operating parameters

The agent telephone can have either the AWC or the DWC key defined, but not both.

The DWC key ACD DN designation has to match the agent's In-Call designation.

Beginning with X11 Release 19, a Display Waiting Calls key for a particular ACD DN can be assigned to every ACD agent in the queue.

Display Waiting Calls (DWC) key (Advanced)

A Display Waiting Calls key can be assigned to an agent position for each ACD DN. The Display Waiting Calls reflects all calls that are in queue but have not been presented.

The Calls Waiting indicator relies on thresholds associated with Automatic Overflow. The Busy Threshold (BYTH) and Overflow Threshold (OVTH) govern Automatic Overflow and provide steady, flashing, and fast flashing lamps.

Beginning with X11 Release 15, two prompts allow the lamp states to operate independently of the Automatic Overflow parameters. Call Waiting Lamp Flash (CWLF) and Call Waiting Lamp Fast Flash (CWLW) can be configured to flash and fast flash the lamps even though the Automatic Overflow parameters have not been met or exceeded.

Depending on the threshold values set for each ACD DN, the following states are displayed. The information on the Display Waiting Calls key is updated every time the key is pressed.

- **Dark or blank** The queue is empty, or the number of calls in the queue is less than the Calls Waiting Threshold (CWTH).
- **Steadily lit** The CWTH has been met. The number of calls in the queue is less than the Busy Threshold (BYTH) or the Call Waiting Lamp Flash (CWLF) threshold, or both.
- **Flash** The BYTH or the CWLF threshold, or both, has been met. The number of calls in the queue is less than the Overflow Threshold (OVTH) or the Call Waiting Lamp Fast Flash (CWLW), or both.
- **Fast flash** The OVTH or the CWLW, or both, has been met or exceeded.

When the key is pressed, the Calls Waiting status for the ACD DN is displayed as follows:

a a a—b b b—c c c—d d d d

Legend:

- a a a = calls waiting in queue
- b b b = agent positions occupied
- c c c = waiting time for the oldest call in the queue
- d d dd = sum of all calls in other source TOF queues, call request queues from other network locations targeting this ACD DN, and CCR calls

Emergency key (Advanced)

In the event of threatening or abusive calls, an agent can note the trunk access code and trunk member number shown on the display. The agent presses the Emergency (EMR) key, establishing a no-hold conference with the supervisor (if one is assigned). The agent must remain in the conference for the duration of the call. At the supervisor's telephone, the Answer Emergency lamp flashes and a continuous buzzing sound is emitted. The ACD POS ID of the calling agent is displayed on the display of the supervisor's telephone. If equipped by the customer, a tape recorder can be used to record the call, or an emergency message can be typed on the maintenance TTY, or both.

When the agent presses the Emergency key, the associated lamp indicates the action being taken as follows:

- **Dark** Neither the supervisor nor the recording trunk is available. The supervisor may be busy on another emergency call, may be unassigned, or the telephone is not equipped with an Answer Emergency key. In addition, the recording trunks may all be busy or unassigned.
- **Flashing** The supervisor is available, but has not yet answered the emergency call.
- **Steadily lit** The supervisor or recording trunk, or both, is conferenced into the call.

When answering an emergency call, the supervisor listens through the built-in loudspeaker by leaving the handset on-hook or the headset unplugged. The supervisor can also put the emergency call on hold, without affecting the agent or caller, to make another call or perform another action. The supervisor returns to the emergency call by pressing the Answer Emergency key again. The Answer Emergency lamp fast flashes (120 ipm) while the call is on hold.

The recording device connects to a paging trunk with a Recorder (RCD) defined in software. When the agent presses the Emergency key, the recorder is conferenced into the conversation.

Paging trunk connections

The input impedance of a typical tape recorder is 47 K Ω , but the output impedance of the paging trunk is switch selectable for 600 or 900 Ω . Therefore, it may be necessary to add a 600 or 900 Ω resistor parallel with the tape recorder input to properly terminate the paging trunk.

Emergency Teletype messages

When the agent presses the Emergency key, the following messages can be generated on the maintenance teletype:

EMR 100 RC L S C U RR MMM

EMR 100 AG XXXX YYYY

EMR 100 OR L S C U RR MMM

Legend:

RC	= Recording trunk for emergency recorder
L	= Loop for recording trunk
S	= Shelf for recording trunk
C	= Card for recording trunk
U	= Unit for recording trunk
RR	= Route number for recording trunk
MMM	= Member number for recording trunk
AG	= Agent has pressed the Emergency key
XXXX	= the ACD DN assigned to that agent

YYYY = the Agent Position ID (POS-ID)

OR = the originator

Before X11 Release 14, the ACD DN and the POS ID digits are given in reverse order. The character “A” signifies a “0” and the digit “0” signifies the end of the number. For example, the ACD DN “01A4” would denote “401” and POS ID “5412” would denote “2145.”

X11 Release 14 and later displays the ACD DN and Position ID as they actually are. For example, ACD DN 301 appears on the printout as 301.

The letters L S C and U denote loop, shelf, card, and unit identifiers of the call origin. If the call is coming into the system, the RR and MMM parameters show the route and member numbers of the trunk. If the originating call is from within the system, these two fields are absent.

In-Calls key (Basic)

Meridian 1 telephones can have the In-Calls key programmed to be associated with an ACD DN, except the 500/2500 telephones, as they do not have key lamp functions. The Position ID functions apply to all ACD telephones.

Calls within ACD are presented on the In-Calls key at the agent position. The position identifier (POS ID) is a number identified with the In-Calls key. The POS ID is a unique number from the customer’s numbering plan. This number identifies the agent position for Automatic Number Identification (ANI), Automatic Identification of Outward Dialing (AIOD), and Call Detail Recording (CDR) purposes. This number *cannot* be the same as the ACD DN and *cannot* be used to call the ACD agent position. The In-Calls key is always located on key 0 (bottom key) on the agent position.

When an incoming ACD call is presented to an agent position, the following events occur:

- Tone ringing is heard if the telephone is equipped with a built-in handset and the telephone is not in use.
- A three second tone sounds from the telephone loudspeaker if the telephone is equipped with a headset or plug-in handset.
- The In-Calls lamp flashes slowly (60 ipm).

An incoming ACD call can be terminated in the following ways:

- If the caller disconnects first, the call is released and the next call is presented.
- The agent disconnects first by pressing the In-Calls key. This releases the current call and the next call is presented.
- The agent presses the DN key.
- The agent presses the Not Ready key.
- The agent presses the Release key.

Calls can be automatically connected to an agent in the answered state by the advanced Call Force feature. When an agent is available, a call can be presented.

Note: Calls extended by the attendant to the ACD DN are not automatically returned to the attendant if they remain unanswered past the attendant recall threshold.

Log In (Basic)

Agents must log in before performing any agent functions. Each ACD telephone has a Position ID. To log in with the MSB key, the agent presses the key, and the MSB lamp goes out. The agent position is now in the operative mode.

An ACD agent at an ACD telephone can log in and out by toggling the MSB key between the operative mode and the MSB mode.

Optionally with the ACD-C1 or ACD-D package, each agent who uses an ACD agent position can be assigned an Agent ID or a Position ID. To log in with the Agent ID, go off-hook and dial the Agent ID. Press the In-Calls key to begin receiving ACD calls. To log in using the Position ID, go off-hook and press the In-Calls key. Press the In-Calls key again (or the Not Ready key) to begin receiving ACD calls.

Data agents

Data agents can log in using the MSB key if the Data Shift key on the Add-on Data Module (ADM) is lit. Refer to the ACD-C document, *Automatic Call Distribution ACD management commands and reports* (553-2671-112), for a description of Data agent log in methods.

500/2500 telephone

The agent logs in with a SPRE code plus 97 and is notified of the telephone state with a specific tone.

Note: The Call Forward and Message Waiting dial tones take precedence over the ACD Logged In dial tone.

When the telephone is idle and the agent is not logged in, a standard dial tone sounds when the handset is lifted. To log in, the agent lifts the handset and enters the SPRE code plus 97. Replacing the handset places the agent position in the idle agent queue.

The agent can also log in with the Agent ID number by entering the SPRE code plus 97 and the 4-digit Agent ID number. When the agent goes off-hook again, the Log In tone sounds.

Note: A busy tone indicates that an Agent ID log in number is not unique. If the ID number is invalid, an overflow tone sounds.

Log Out (Basic)

To log out, the agent enters the SPRE code plus 97 and goes on-hook. The agent is now logged out, and a standard dial tone sounds when the telephone is off-hook.

Beginning with X11 Release 19, M2216, M2008, and M2616 telephones, equipped with display units and ACD package D display the “LOGGED OUT” message when the Make Set Busy (MSB) key is deactivated by doing the following:

- disconnecting the headset or handset, if HOML (Handset On-Hook Means Log out) is enabled in LD 23
- placing the handset on-hook

When HOML is not enabled in LD 23, the Make Busy key must be used to log out. If no Make Busy key is available, the agent must use the headset or handset to log out. The moment an agent logs out, the following occurs:

- The agent position is removed from the ACD idle agent queue.
- All reporting against that position stops.

For ACD package C or D, if customer Load Management commands (SAPA/SAGP/SATS) are issued, the effects of these commands do not take place until the agent logs out.

With X11 Release 19 and later and ACD packages C or D, if the MSB key is deactivated and the telephone includes a display unit, the display is updated with the “LOGGED OUT” screen.

The Log Out command clears the Not Ready mode. If not logged in, the agent cannot activate the Not Ready mode.

Note: The MSB key can be used to log out even if the agent logged in with P=Agent or Position ID. Pressing the MSB key while on a call logs the agent out when the call is completed.

Make Set Busy key (Basic)

Meridian 1 ACD digital telephones can have the Make Set Busy key programmed, except for the 500/2500 telephone, which does not have this key or lamp function.

The Make Set Busy (MSB) key causes an agent position to appear busy to the system, preventing the agent from receiving any calls. Activating the Make Set Busy (MSB) key removes the agent from the queue and logs out the agent from the system. The MSB lamp is steadily lit, and the DWC key display is cleared.

Calls presented to but not answered by this agent return to the top of the same queue from which they came. Pressing the MSB key does not disconnect an active call, but prevents further calls from being presented to that agent position. Neither IDN nor ACD calls can be received while the MSB key is activated. The agent can, however, originate calls from the DN key.

When the MSB key is deactivated, the agent receives incoming IDN calls. The agent must log in to receive ACD calls.

If all the agent positions assigned to an ACD DN are in the MSB mode, that ACD DN is automatically placed into Night mode. ACD Night mode is independent from the Night Service activated at the attendant console and can be different for each ACD DN. See *X11 features and services* for more information.

Night Mode (Basic)

When an ACD DN is in the Night Mode, the agent queue does not send new calls to that ACD DN or number. Depending on the customer option, callers can be connected to a Recorded Announcement or forwarded to another ACD DN. See *X11 features and services* for more information.

500/2500 telephone

The telephone is automatically placed in Night Mode by the agent entering the SPRE code plus 97. By doing this, the agent performs a log off from the system.

Not Ready key (Basic)

An agent, after completing an ACD call, may need time to perform tasks before accepting another call. This is post call-processing. When the agent presses the Not Ready (NRD) key, the agent is removed from the agent queue and the NRD lamp is lit steadily.

Beginning with X11 Release 19, M2216ACD, M2008, and M2616 telephones with display units indicate “NOT READY.”

While the agent position is in the Not Ready state, the agent can receive or originate calls using the DN key, but ACD calls cannot be connected to the In-Calls key. When the agent’s post call tasks are finished, the agent presses the NRD key. The Not Ready lamp goes out, and the agent is placed in the agent queue. It is also possible for the agent to press the In-Calls key to cancel Not Ready and reenter the queue. When the NRD key is pressed, any call presented to the In-Calls key (but not yet answered by the agent) is moved back to the head of its priority grouping in the incoming call queue for the ACD DN.

500/2500 telephone

Since 500/2500 telephones do not have key lamps, the telephone is placed in the Not Ready state by typing SPRE + 98. A specific tone informs the agent that the telephone is in this state.

Note: The Call Forward and Message Waiting, the Call Forward, and the Message Waiting dial tones take precedence over the ACD Not Ready dial tone.

When the telephone is idle and logged in, the agent lifts the handset and enters the SPRE code plus 98 to activate the Not Ready feature. Replacing the handset takes the agent out of the queue and completes the Not Ready feature activation.

When the agent lifts the handset again, the Not Ready tone sounds. Calls are still received on the telephone's DN. To return to the queue, the agent lifts the handset and reenters the SPRE code plus 98. Replacing the handset places the agent back in the idle agent queue, completing the Not Ready process.

When the agent lifts the handset again, the Log In tone sounds and the telephone is in the Ready mode. The agent must be logged in to activate the Not Ready mode. If the agent logs out, the Not Ready state is cleared.

Release key (Basic)

The optional Release (RLS) key can be assigned in place of, or as well as, the Not Ready key if there is not a requirement for post-call work. When an agent disconnects from a call by using the RLS key, the agent position is immediately placed in the agent queue.

500/2500 telephone

The 500/2500 telephone does not have a Release key. To release a call, the agent hangs up. If the other party disconnects first, the agent must still hang up to release the call connection.